

REMARKS

Reconsideration of this application is requested.

The claims pending for consideration are claims 1-14 and new claims 20 and 21. Of the new claims, claim 20 is drawn to a preferred copper salt and bases. Support for this claim is found at, for example, page 2, line 26 of the applicant's disclosure.

Claim 21 is drawn to the applicant's process for preparing the applicant's dyes. Basis for claim 21 is found at, for example, page 2, lines 25-29 and in the working examples.

The Examiner is respectfully requested to reconsider the Section 112, 1st ¶ enablement rejection of claims 1-14. In rejecting the claims, the Examiner states that claim 1 "does not contain a working formula indicating the structural makeup for Applicant's invention. Applicant defines the sum of $(x+y+z)$ is 4. However, the elected species $x+y+z$ does not equal 4."

With respect, it is submitted that the applicant's disclosure is enabling. In this connection, the Examiner's attention is called to the applicant's disclosure at page 11, beginning at line 17, the section entitled "*Analysis of phthalocyanines*". All of the phthalocyanines disclosed in this application are prepared by cyclizing four equivalents of β -sulfo substituted phthalic acid. This ensures that the initial phthalocyanine product formed on cyclization is phthalocyanine tetrasulfonic acid. The substituents x , y and z are all derived from the sulfonic acid substituents. Thus, $x+y+z$ must always be 4.

The Examiner will note that in applicant's Example 1, stage 1, analysis of the phthalocyanine tetrasulfonic acid formed gave a value of 3.8 sulfonic acid groups per phthalocyanine. However, detailed analysis of such / material by mass spec has shown that the major product is phthalocyanine tetrasulfonic acid.

The problems with analysis come after conversion of the phthalocyanine tetrasulfonic acid to the final product. The phthalocyanines formed after reaction with ammonia and a particular amine are a mixture and the only way to assess the ratios of x , y and z is elemental analysis. As disclosed in the section *Analysis of phthalocyanines*, this technique is very sensitive to any impurities which will influence the absolute value of x , y and z rather than the ratio's of x , y and z to each other. Thus when x , y and z exceed 4 (as in Example 1), they should be viewed as indicative of the ratios of these groups rather than absolute number. It is respectfully submitted that, in the circumstances, the applicant's disclosure is enabling. This is not a case where the applicant did not have a clear idea of the scope and nature of his invention

as the Examiner suggests. The disclosure is clear and adequate for one in the art to practice the invention in its full scope as claimed, taking into account the foregoing explanation as to analysis of the phthalocyanines.

The Examiner is also requested to reconsider the Section 112, 2nd ¶ rejection of claims 1-14. The foregoing comments regarding the enablement point are also thought to respond to the Examiner's comment that the applicant's reference to $(x+y+z)$ is 4, is indefinite. This claim language is thought to be clear and definite as to scope for those in the art, particularly when considered in the context of the applicant's disclosure.

The applicant does not understand the Examiner's comment that "it is unclear whether the limitations following the phrase are part of the claimed invention" (page 5, 2nd ¶ of the action). The portion following the phrase "the sum of $(x+y+z)$ is 4" forms a part of the invention.

Claim 1 has been amended to define R^4 and R^5 as representing, with the nitrogen to which they are attached, an optionally substituted "5- or 6-membered" aliphatic or aromatic ring system. This follows the language of claims 2 and 4 (see also the applicant's disclosure at page 4, line 4) and is thought to obviate the Examiner's objection as set out in the 3rd ¶, page 5 of the action. It is understood that the Examiner has no objection to use of the term "optionally substituted" in claim 1 as this is used without objection in claims 2 and 4 and is accepted as standard claim terminology.

The Examiner's objection to claims 1, 2 and 4 as set out in the 4th ¶, page 5 of the action has been obviated by incorporating essential process features. Support for the recited process features is found, for example, at page 2, lines 25-29 of the applicant's disclosure.

The applicant has noted the Examiner's suggestion that the applicant's claims should be amended so as to be process claims. Claims 1, 2 and 4 are, of course, product-by-process claims and should be acceptable under U.S. practice and law as there is no other way to satisfactorily define the applicant's product even though they are novel and differ uniquely and advantageously over the related prior art products.

Notwithstanding the applicant's position as set out above, new process claim 21 has been presented to claim the preparation of the applicant's compositions. Allowance of this claim is thought to be warranted along with the other claims herein.

The applicant considers that the foregoing amendments and comments obviate the basis for the Examiner's rejections under Section 112, 1st ¶ and Section 112, 2nd ¶. Accordingly, favorable reconsideration with allowance is requested.

Respectfully submitted,

MORGAN LEWIS & BOCKIUS LLP

By 

Paul N. Kokulis
Reg. No. 16773

Date: June 10, 2009

Customer No. 09629
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-3000
Facsimile: (202) 739-3001
Direct: (202) 739-5455